Maryland Department of Health and Mental Hygiene

201 W. Preston Street • Baltimore, Maryland 21201

Martin O'Malley, Governor - Anthony G. Brown, Lt. Governor - Joshua M. Sharfstein, M.D., Secretary

September 19, 2014

Public Health Preparedness and Situational Awareness Report: # 2014:37 Reporting for the week ending 09/13/14 (MMWR Week #37)

CURRENT HOMELAND SECURITY THREAT LEVELS

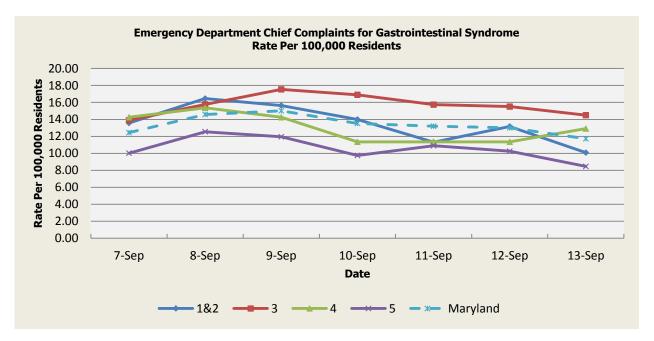
National: No Active Alerts

Maryland: Level Two (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

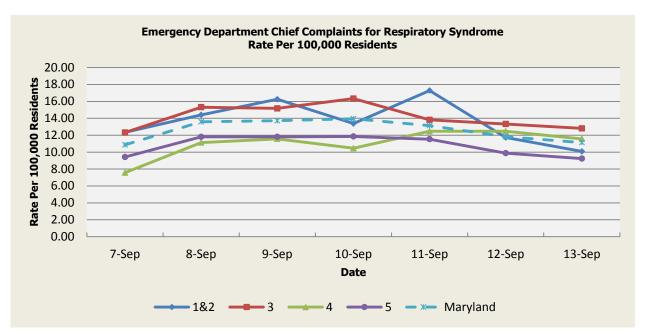
Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census.



There were no GI outbreaks reported this week.

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2 3 4 5 Maryland							
Mean Rate*	13.20 14.14 15.38 10.34 12.72							
Median Rate*	13.17 14.05 14.69 10.25 12.64							

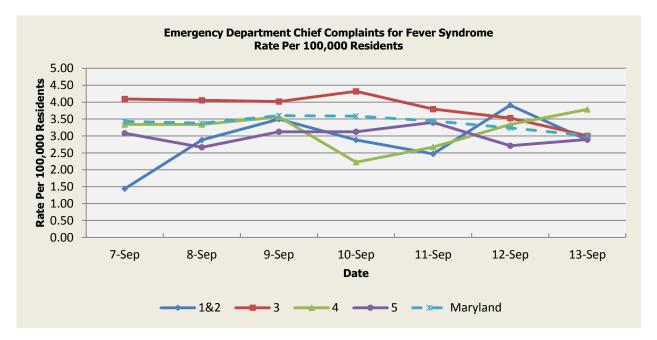
* Per 100,000 Residents



There were no respiratory outbreaks reported this week.

	Respiratory Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2	Maryland						
Mean Rate*	12.04 13.09 13.66 9.70 11.77							
Median Rate*	11.73	12.73	13.13	9.42	11.54			

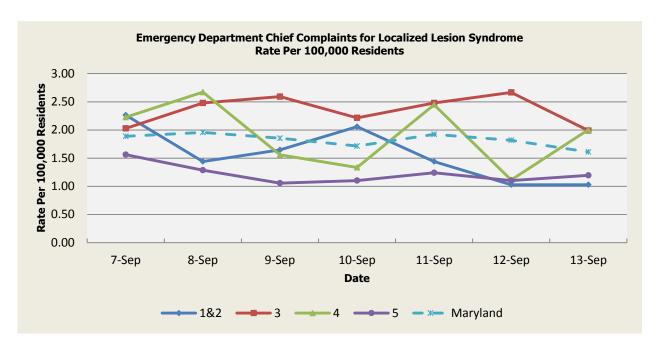
* Per 100,000 Residents



There were no fever outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present								
Health Region	1&2								
Mean Rate*	3.24 3.57 3.81 3.11 3.39								
Median Rate*	3.09	3.46	3.78	3.03	3.27				

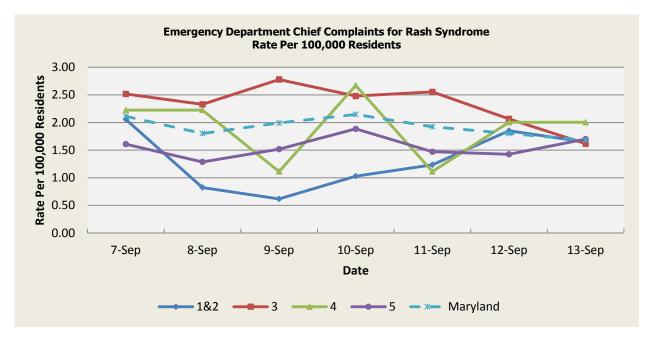
Per 100,000 Residents



There were no localized lesion outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	1.18	1.98	2.03	1.05	1.56		
Median Rate*	1.03	1.92	2.00	1.01	1.52		

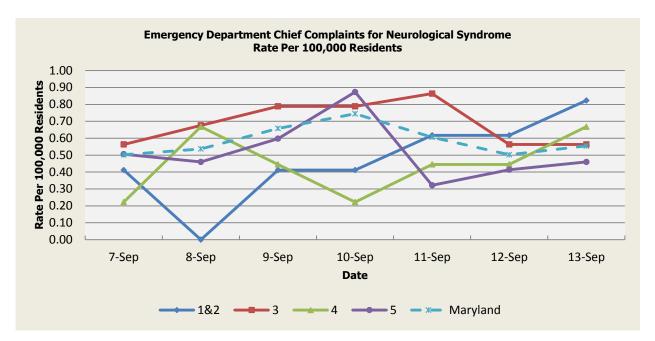
* Per 100,000 Residents



There were no rash outbreaks reported this week.

	Rash Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2 3 4 5 Maryland							
Mean Rate*	1.42 1.73 1.76 1.09 1.47							
Median Rate*	1.23	1.65	1.78	1.06	1.42			

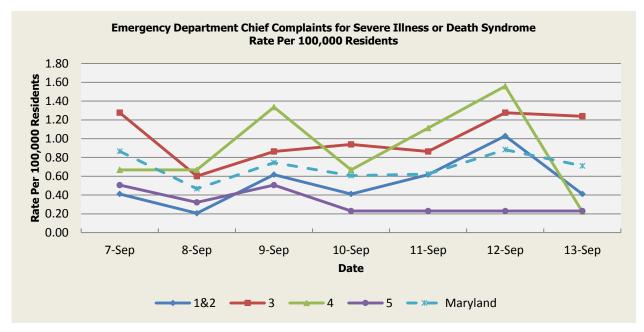
* Per 100,000 Residents



There were no neurological outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present								
Health Region	1&2 3 4 5 Maryland								
Mean Rate*	0.60 0.62 0.58 0.42 0.54								
Median Rate*	0.62	0.60	0.45						

* Per 100,000 Residents



There were no severe illness or death outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2 3 4 5 Maryland							
Mean Rate*	0.81 0.94 0.89 0.42 0.73							
Median Rate*	0.82 0.94 0.89 0.41 0.73							

* Per 100,000 Residents

SYNDROMES RELATED TO CATEGORY A AGENTS

There was not a significant increase above baseline in the rate of ED visits for Botulism-like Syndrome.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present									
Health Region	1&2	1&2 3 4 5 Maryland								
Mean Rate*	0.06	0.06 0.04 0.04 0.03 0.04								
Median Rate*	0.00 0.04 0.00 0.00 0.03									

^{*} Per 100,000 Residents

There was not a significant increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present								
Health Region	1&2 3 4 5 Maryland								
Mean Rate*	0.03 0.03 0.03 0.03 0.03								
Median Rate*	0.00 0.04 0.00 0.00 0.02								

^{*} Per 100,000 Residents

There was not a significant increase above baseline in the rate of ED visits for Lymphadenitis Syndrome.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present								
Health Region	1&2 3 4 5 Maryland								
Mean Rate*	0.33								
Median Rate*	0.21 0.30 0.22 0.23 0.31								

^{*} Per 100,000 Residents

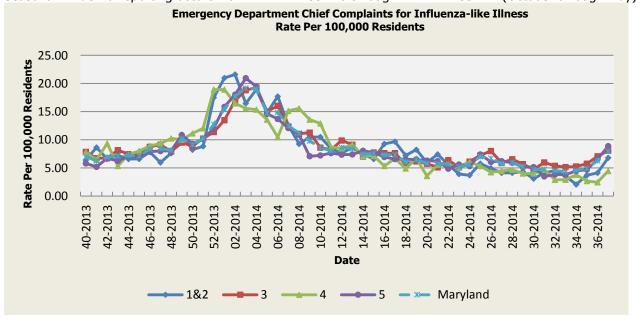
MARYLAND REPORTABLE DISEASE SURVEILLANCE

	Counts of Reported Cases‡						
Condition		Septembe	er	Cumula	ative (Year t	o Date)**	
Vaccine-Preventable Diseases	2014	Mean*	Median*	2014	Mean*	Median*	
Aseptic meningitis	12	52.4	51	237	356.4	369	
Meningococcal disease	0	1	1	5	6.6	8	
Measles	0	0	0	0	1.6	1	
Mumps	0	0.2	0	1	21.4	6	
Rubella	0	0	0	1	1	0	
Pertussis	8	18.4	15	96	142	103	
Foodborne Diseases	2014	Mean*	Median*	2014	Mean*	Median*	
Salmonellosis	26	99.2	96	545	740.4	765	
Shigellosis	10	12.6	11	144	153.2	109	
Campylobacteriosis	12	49.8	47	416	456	461	
Shiga toxin-producing Escherichia coli (STEC)	1	6.6	7	51	51.6	48	
Listeriosis	1	1.4	1	9	12	13	
Arboviral Diseases	2014	Mean*	Median*	2014	Mean*	Median*	
West Nile Fever	1	2.2	1	2	6.6	6	
Lyme Disease	7	107.4	104	477	1172	1154	
Emerging Infectious Diseases	2014	Mean*	Median*	2014	Mean*	Median*	
Chikungunya	3	0.2	0	26	0.2	0	
Dengue Fever	0	0.8	1	5	6.4	8	
Other	2014	Mean*	Median*	2014	Mean*	Median*	
Legionellosis	4	17.6	16	87	104.4	97	

[‡] Counts are subject to change

SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 22 (October through May).

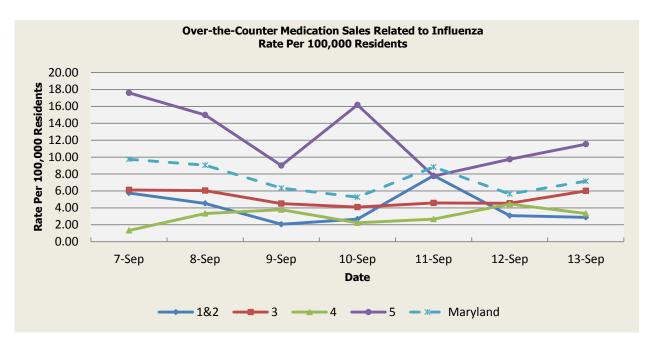


	Influenza-like Illness Baseline Data Week 1 2010 - Present							
Health Region	1&2 3 4 5 Maryland							
Mean Rate*	9.44 9.56 10.37 9.13 9.45							
Median Rate*	7.82	7.92	8.46	7.08	7.64			

* Per 100,000 Residents

^{*}Timeframe of 2009 - 2013

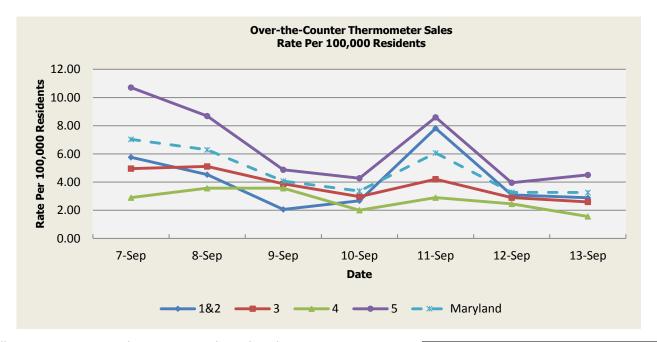
^{**}Includes January through September



All regions experienced an increase above baseline in OTC sales related to influenza as follows: Regions 1 &2 on 9/7; Region 3 on 9/7-9/8 and 9/13; Region 4 on 9/8-9/9 and 9/12-9/13; Region 5 on 9/7-9/8 and 9/10.

	OTC Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.08	5.80	2.81	13.84	8.54
Median Rate*	3.91	4.69	2.45	11.26	6.89

* Per 100,000 Residents



All regions experienced an increase above baseline in thermometer sales as follows: Regions 1 &2 on 9/11; Region 3 on 9/7-9/8; Region 4 on 9/8-9/9; Region 5 on 9/7-9/8 and 9/11.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.76	4.88	3.42	8.37	6.15
Median Rate*	5.14	4.47	3.12	7.63	5.63

* Per 100,000 Residents

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a deescalation of activities towards those in the interpandemic phase may occur. As of January 24, 2014, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 650, of which 386 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

NATIONAL DISEASE REPORTS

PLAGUE (COLORADO): 8 Sep 2014 San Juan Basin Health (SJBH) in coordination with the Colorado Department of Public Health and Environment (CDPHE) has identified a human case of septicemic plague in a La Plata County resident. Read more: http://www.promedmail.org/direct.php?id=20140908.2757605

E COLI (OREGON, WASHINGTON): 9 Sep A 4 year old girl, of Otis [Lincoln County, Oregon], died [Mon 8 Sep 2014] just 8 days after playing in the front yard with other kids at the start of the Labor Day weekend [30 Aug-1 Sep 2014]. Read more: http://www.promedmail.org/direct.php?id=20140911.2763099

EASTERN EQUINE ENCEPHALITIS (NEW HAMPSHIRE): 10 Sep 2014 The New Hampshire Department of Health and Human Services (DHHS) announced the 2nd case human case of eastern equine encephalitis [EEE] was found this season [2014] in the state. Read more: http://www.promedmail.org/direct.php?id=20140911.2767518

E COLI (KENTUCKY): 12 Sep A total of 5 Kentucky children were being treated at Kosair Children's Hospital on Friday, 12 Sep 2014, for a potentially life-threatening syndrome usually caused by E. coli infection, and the state health department has launched an investigation into how they got sick. Read more: http://www.promedmail.org/direct.php?id=20140913.2770654

INTERNATIONAL DISEASE REPORTS

LISTERIA (DENMARK): 9 Sep 2014 A new death [the 15th] was confirmed on Monday [8 Sep 2014], and the number of Listeria infections has now risen to 38. Read more: http://www.promedmail.org/direct.php?id=20140910.2764685

EBOLA (WEST AFRICA): 9 Sep 2014 The EVD outbreak in West Africa has killed 2288 people, with half of them dying in the last 3 weeks, the World Health Organization (WHO) says. Read more: http://www.promedmail.org/direct.php?id=20140909.2761822

HEMORRHAGIC FEVER (VENEZUELA): 11 Sep 2014 El Carabobeno [a news media source] reports that on Thu 11 Sep 2014, Angel Sarmiento, President of the Physician's College of the state of Aragua, noted that in the last 72 hours 8 people have died in the Maracay Central Hospital from an unidentified illness. Read more: http://www.promedmail.org/direct.php?id=20140912.2767248

EBOLA (DRC): 12 Sep 2014 Update on the Ebola virus in DRC. Read more: http://www.promedmail.org/direct.php?id=20140914.2773446

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the DHMH website: http://phpa.dhmh.maryland.gov/influenza/fluwatch/SitePages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.dhmh.md.gov/

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE		
	Allegany County		
Pagions 1 & 2	Frederick County		
Regions 1 & 2	Garrett County		
	Washington County		
	Anne Arundel County		
	Baltimore City		
Dagion 2	Baltimore County		
Region 3	Carroll County		
	Harford County		
	Howard County		
	Cecil County		
	Dorchester County		
	Kent County		
Region 4	Somerset County		
	Talbot County		
	Wicomico County		
	Worcester County		
	Calvert County		
	Charles County		
Region 5	Montgomery County		
	Prince George's County		
	St. Mary's County		

